

the combination of conducting and insulating glass structures specifically reaches areas of the cover wafer during glass frit bonding so that they are electrically connected.

The invention is especially suited for microelectromechanical structures which are integrated with structures of the evaluation electronics. Moreover, more than two semiconductor wafers can also be connected with each other as a stack. Then, there are also central areas in this stack, where cover wafer and system wafer may be present at the same time.

The invention is explained and supplemented by means of examples with two semiconductor wafers using the drawing.

Fig. 1 is a system wafer 1 which was connected with a cover wafer 2 according to an example of a process, namely as a schematic section along line/plane A-A of Fig. 2.

Fig. 2 is a top view of an arrangement as it is shown in Fig. 1.

Fig. 3 is a variant of a conducting connection between system wafer and cover wafer.

Change(s) applied
to document,

4

/J.L.B./

11/29/2011

Fig. ~~3~~⁴ is a further variant of a conducting connection between system wafer and cover wafer analogously to Fig. 3.

As it is shown in Fig. 1, low-melting, structured insulating intermediate glass layers 6, 6a, 6b and the electrically conductive solder 5 on the basis of glass (glass paste) connect the system wafer 1 with the cover wafer 2, a selective contacting of the cover wafer 2 with the

¹ Translator's note: should read "Fig. 4"